

2016 Triennial Review of and Amendments to Montana's Water Quality Standards



Myla Kelly
Supervisor
mkelly2@mt.gov
406-444-3639

Amy Steinmetz
Water Quality Standards Specialist
asteinmetz@mt.gov
406-444-0371

Water Quality Standards and Modeling Section
MT DEQ

Triennial Review

- Requirement of Montana Code Annotated 75-5-301, “classification and standards for state waters:”
 - “The board shall...(3) review, from time to time at intervals of not more than 3 years and, to the extent permitted by this chapter, revise established classifications of waters and adopted standards of water quality;”
- Montana’s last triennial review ended in October 2012

Standards Open to Comment

- Mixing zone rules at Administrative Rules of Montana (ARM) 17.30 subchapter 5
- Surface water designated uses and water quality criteria at ARM 17.30 subchapter 6
- Nondegradation rules at ARM 17.30 subchapter 7
- Ground water rules at ARM 17.30 subchapter 10
- Compliance schedule authorizing provision at ARM 17.30.1350
- Numeric water quality criteria included in Department Circulars DEQ-7 (“Montana Numeric Water Quality Criteria”) and DEQ-12A and B (“Montana Base Numeric Nutrient Standards” and “Nutrient Standards Variance”)

Timeline

- January 8, 2016—Water Pollution Control Advisory Council (WPCAC) meeting
- February 5, 2016—Board of Environmental Review (BER) voted to open the triennial review by requesting public comments on Montana's water quality standards
- March 11, 2016—WPCAC briefing on anticipated changes to water quality standards
- June 3, 2016—Public comment period closed and BER held the public hearing
- September 9, 2016—WPCAC meeting
- September 30, 2016—BER meeting
- December 9—Hopeful adoption date (BER)
- If adopted, submit to EPA for review and approval

Proposed Rule Amendments

- Department Circular DEQ-7, “Montana Numeric Water Quality Criteria”
- Administrative Rules of Montana



DEQ-7 Changes

- Housekeeping
 - Grammar, wordsmithing, and technical edits
 - Correction of errors



Source: Gallatin River Task Force

Human Health Criteria (HHC)

- EPA adopted 94 new/updated National Recommended Water Quality Criteria in 2015
- 67 HHC will be updated to incorporate EPA's newly recommended human exposure inputs.
 - Daily water intake 2 L → 2.4 L
 - Mean adult body weight 70 kg → 80 kg
 - Fish consumption 17.5 g → 22 g



New Pesticide Criteria

- Montana Agricultural Chemical Groundwater Protection Act
 - Clothianidin
 - Glufosinate
 - Saflufenacil
 - Thiamethoxam
 - Sulfentrazone



Aquatic Life Criteria

- Cadmium (2016)
 - Currently acute/chronic are 0.52/0.097 $\mu\text{g/L}$ @25 mg/L hardness
 - Proposed acute/chronic are 0.49/0.25 $\mu\text{g/L}$ @25 mg/L hardness
- Carbaryl (2012)
 - Proposed acute and chronic are both 2.1 $\mu\text{g/L}$



Other DEQ-7 Changes

- Pollutant category updates
- Maintain narrative criteria in ARM 17.30 subchapter 6
 - Color
 - pH
 - Temperature
 - Turbidity



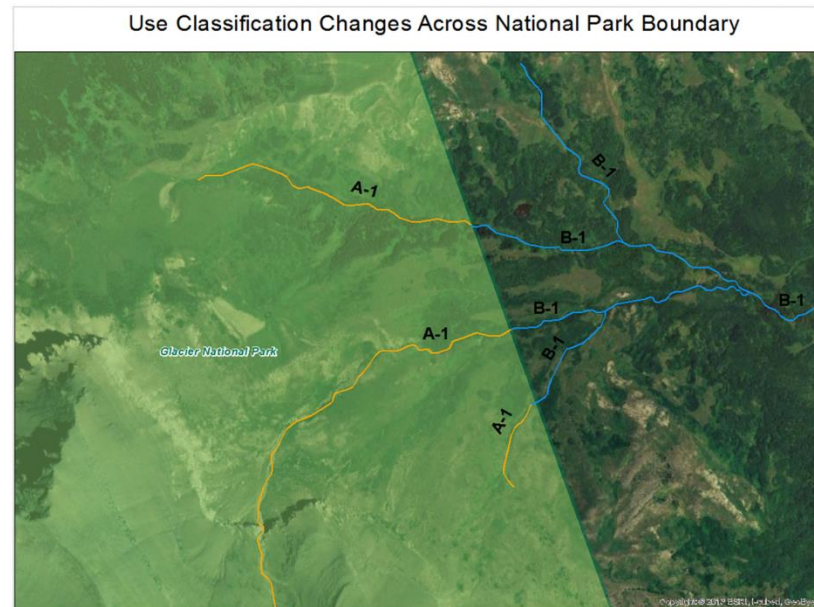
Nutrient Updates

- Nutrient language in introduction and footnotes/reference to DEQ-12 (changes proposed in DEQ-7)
- Clark Fork River nondegradation clarification (amendment proposed to ARM 17.30.715)



ARM 17.30 Subchapter 6

- Add “most probable number” (mpn) as acceptable units for E. coli measurements
- Modify the surface water-use designation to have defined start and end points (lat/long) and remove tribal waters to honor jurisdictional boundaries
- Reference to compliance schedule authorizing provision in permitting rules



Comments Received- 304(a)

State non-adoption

- For parameters which EPA has published new or revised criteria recommendations and the State has not adopted those, we are required to provide an explanation.
 - Aluminum
 - Ammonia
 - Methyl Mercury
 - Selenium

Comments Received - Public

- Montana should use a total dissolved metals criteria rather than the current total recoverable metals criteria.
- Allow for freshwater copper criteria to be calculated using procedures in EPA's 2007 Copper Criteria recommendation.
- POTWs should not be forced to shoulder the cost burden of cleaning up our lakes, rivers, and streams. Reduction of N and P will have little effect on water quality without addressing other sources of contamination.

Comments Received – EPA

- Retain Maximum Contaminant Levels (MCL) where they are more stringent than 304(a) criteria.
- Clarify which water quality criteria apply to which designated uses.
- Improve Montana's nondegradation rules
- Consider a broad narrative statement to protect downstream WQS
- Efforts regarding water quality standards and natural conditions must meet EPA's public participation requirements and be submitted to EPA for review/action.

Questions?

